## Pre-Calc/ Col. Prep. Math Lesson Plans Week 9

Teacher: Ngoma Botumile A

Subject: Pre Calc. & Col. Prep. Math

Week of: 10/17-10/21/2016

Grade: 11 & 12

<b>Dav/Date:</b> Tuesday, 10/18/2016		
<ul> <li>Unit 4: Trigonometric Identities Students analyze and transform trigonometric functions and identities.</li> <li>Unit 5: Trigonometric Equations Students analyze and solve trigonometric equations.</li> <li>Unit 6: Applications of Trigonometric Functions Students apply and analyze trigonometric functions to solve real-world problems.</li> </ul>	<ul> <li>TEKS:</li> <li>Process Standards, PC.1A, PC.1B, PC.1C, PC.1D, PC.1E, PC.1F, PC.1G, PC.4F, PC.2P, PC.2"O", PC.5N, PC.5M. (List of TEKS details is posted above the board.)</li> <li>ELPS: : C.3D, C.3H, C.3E, C.5G, C.1E, &amp; C.2H (ELPS detail descriptions are posted in Class)</li> <li>Vocabulary: Test</li> </ul>	
<b>Today's Objective: Review Week:</b> Students will take a test on the graphs of the six trigonometric functions.	<b>Essential Understanding/Guiding Questions:</b> 1. test	
<ul> <li>D. E. A. R: 7:40am -8:00am</li> <li>1) As required school wide, points will be lost for lack of participation. See your D.E.A.R. download for this week.</li> <li>2) No points for tardy students during D.E.A.R.</li> <li>Warm-up: From warm-up table download Agenda: <ol> <li>Warm-up Solution</li> <li>Check downloads week 9</li> <li>Start test.</li> <li>UH Contest Practice Saturday tutorials 9:30am to 12:30 pm</li> </ol> </li> </ul>		
<ul> <li>Homework: HOW#9 and POW #9. Due Friday @ 11:59pm.</li> <li>Evaluation/Exit Ticket: 5-Minutes Summary of what you have learned today. (1-minutes discussion and 4-minutes writing at level-0 voices) Make sure to include essential understanding/ Guiding questions in your summaries.</li> </ul>		

<b>Day/Date:</b> Thursday: 10/20/2016		
	TEKS:	
Unit 4: Trigonometric Identities Students	Process Standards, PC.1A, PC.1B, PC.1C, PC.1D,	
analyze and transform trigonometric functions	PC.1E, PC.1F, PC.1G, PC.4F, PC.2P, PC.2"O",	
and identifies.	PC.5N, PC.5M. (List of TEKS details is posted	
Students analyze and solve trigonometric	above the board.)	
equations		
<ul> <li>Unit 6: Applications of Trigonometric Functions Students apply and analyze trigonometric functions to solve real-world problems.</li> <li>Today's Objective: Review Week: Students will analyze the six trigonometric functions and proof fundamental trigonometric identities, On page 437 to 439 summary</li> <li><u>D. E. A. R: 7:40am -8:00am</u> 1) As required school wide, points will be lost for</li> </ul>	<ul> <li>ELPS: : C.3D, C.3H, C.3E, C.5G, C.1E, &amp; C.2H ( ELPS detail descriptions are posted in Class)</li> <li>Vocabulary: Periodic function pp391 Reciprocal identity pp393 Quotient identities pp 393 Pythagorean identities pp 394 Even function Odd function.</li> <li>Essential Understanding/Guiding Ouestions:</li> </ul>	
lack of participation. See your D.E.A.R. download	1. What are periodic functions?	
for this week.	2. How would you explain a periodic function graphs?	
2) No points for tardy students during D.E.A.R.		
Warm-up: From warm-up table download		
<ul> <li>Agenda: <ol> <li>Warm-up Solution</li> <li>Compare graphs of sin, csc, cos, sec, tan, &amp; cot.</li> </ol> </li> <li>Copy notes from download Page 437 to 439 on summary of trig graphs.</li> <li>UH Contest Practice Saturday tutorials 9:30am to 12:30 pm</li> </ul>		
<b>Homework:</b> HOW#9 and POW #9. Due Friday @ 11:59pm.		
<b>Evaluation/Exit Ticket:</b> 5-Minutes Summary of what you have learned today. (1-minutes discussion and 4-minutes writing at level-0 voices) Make sure to include essential understanding/ Guiding questions in your summaries.		

<b>Dav/Date:</b> Friday 10/21/2016		
TFKS.		
Unit 4: Trigonometric Identities Students analyze and transform trigonometric functions and identities. Unit 5: Trigonometric Equations Students analyze and solve trigonometric equations.	Process Standards, PC.1A, PC.1B, PC.1C, PC.1D, PC.1E, PC.1F, PC.1G, PC.4F, PC.2P, PC.2"O", PC.5N, PC.5M. (List of TEKS details is posted above the board.)	
<b>Functions</b> Students apply and analyze trigonometric functions to solve real-world problems.	ELPS: : C.3D, C.3H, C.3E, C.5G, C.1E, & C.2H ( ELPS detail descriptions are posted in Class) Vocabulary:	
<b>Today's Objective: Review Week:</b> Students will take a test on the graphs of the six trigonometric functions.	Test Essential Understanding/Guiding Questions: Group Test	
<ul> <li>D. E. A. R: 7:40am -8:00am</li> <li>1) As required school wide, points will be lost for lack of participation. See your D.E.A.R. download for this week.</li> <li>2) No points for tardy students during D.E.A.R.</li> <li>Warm-up: From warm-up table download</li> <li>Agenda: <ol> <li>Warm-up Solution</li> </ol> </li> </ul>		
<ol> <li>Start your group test page 127 transformations</li> <li>UH Contest Practice Saturday tutorials 9:30am to 12:30 pm</li> </ol>		
<b>Homework:</b> HOW#9 and POW #9. Due Friday @ 11:59pm.		
<b>Evaluation/Exit Ticket:</b> 5-Minutes Summary of what you have learned today. (1-minutes discussion and 4-minutes writing at level-0 voices) Make sure to include essential understanding/ Guiding questions in your summaries.		

## TEKS

**PC.5M** Use trigonometric identities such as reciprocal, quotient, Pythagorean, cofunctions, even/odd, and sum and difference identities for cosine and sine to simplify trigonometric expressions.

**PC.5N** Generate and solve trigonometric equations in mathematical and real-world problems.

**PC.20** Develop and use a sinusoidal function that models a situation in mathematical and real-world problems.

**PC.2P** Determine the values of the trigonometric functions at the special angles and relate them in mathematical and real-world problems.

**PC.4E** Determine the value of trigonometric ratios of angles and solve problems involving trigonometric ratios in mathematical and real-world problems.

**PC.4F** Use trigonometry in mathematical and real-world problems, including directional bearing.

PC.4G Use the law of sines in mathematical and real-world problems.

**PC.4H** Use the law of cosines in mathematical and real-world problems.